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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,602	03/17/2004	Taketo Itoh	0445-0348PUSI	4176
2292	7590	09/25/2006	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			HILL, LAURA C	
			ART UNIT	PAPER NUMBER
			3761	

DATE MAILED: 09/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/801,602

Applicant(s)

ITOH ET AL.

Examiner

Laura C. Hill

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4, 5 and 9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 5 and 9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |



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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
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EXAMINER

ART UNIT	PAPER
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20060919

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 17 July 2006 has been entered.

Response to Arguments

Applicant's arguments, see pages 4-11 filed 17 July 2006, with respect to the rejection(s) of claim(s) 1 and 4-5 under Okuda et al. '140 have been fully considered and are persuasive since they are based on newly amendments to the claims. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Gravdahl (US 3,545,441) as discussed below.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Disposable Diaper with Regions of Varying Stiffness and Leg Elastic Gathers for Application while Standing.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 4-5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gravdahl (US 3,545,441; herein 'Gravdahl') in view of Buell (US 5,151,092). Gravdahl discloses an absorbent core 10 for use in diapers, sanitary napkins, etc (column 1, lines 2-4) comprising a mass density greatest in the center than in the laterally opposed regions for liquid absorption (column 1, lines 73-column 2, line 50, figures 2-3) [Note that since the density is greatest in the center region, the center region also has a higher bending stiffness and variation in basis weight than in the outer lateral regions since it is well known that an increase in density means there is more material and thus the area has a higher resistance to bending upon application of force.] Gravdahl does not expressly disclose a pair of leg elastic standing gathers or waistbands. Addition of leg elastics and waistbands to absorbent diaper wearing articles is well known to those of ordinary skill in the art as supported by Buell. Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to modify the absorbent core of Gravdahl to be used in a disposable diaper with leg elastics and waistband.

Gravdahl also does not expressly disclose bending stiffness, leg elastic elongation/extension ratio, change in elongation/effective extension ratio, or crotch portion width values. Bending stiffness is a well-known result effective variable since it is result of the area in which it is measured. Extension ratio is a well-known result effective

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variable since it is result of the type and number of elastics used. Rate of increase is a result effective variable since it is at least a result of the amount of tensile load applied in a given amount of time. Core width is a result effective variable since it is at least dependent on the overall diaper size. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Gravdahl/Buell with the aforementioned values, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch and Slaney*, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980). Furthermore, where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255; 195 USPQ 430, 433 (CCPA 1977).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Murakami et al. (US 5,669,895) is cited for showing an absorbent article such as a disposable diaper being thicker and thus inherently stiffer in the center region adjacent visible pattern 11. Bogdanski et al. (US 5,830,202) is cited for showing an absorbent structure 1 such as a diaper having laterally outside storage zones 13, 13' having a basis weight of greater than 25-40 gsm and a centrally disposed between acquisition zone 11 having a basis weight of less than 25 gsm and thus stiffer outer lateral zones 13, 13'. Megison et al. (US 4,781,710) is cited for showing greater density end regions 30 than central tuft region 28 disposed therein between. Holtman (US

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4,449,979) is cited for showing a diaper having a density and thus inherently a stiffness greatest at its outer transverse ends than in the center for liquid absorbing. Edwardsson (US 6,441,268) is cited for showing a diaper with a lower density and thus lower stiffness in the center of the absorbent core.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C. Hill whose telephone number is 571-272-7137. The examiner can normally be reached on Monday through Friday (hours vary).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TATYANA ZALUKAEVA
SUPERVISORY PRIMARY EXAMINER



Laura C. Hill
Examiner
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